

INTERNATIONAL COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 04 - 997 - PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2005/003766	International filing date (day/month/year) 04/02/2005	(Earliest) Priority Date (day/month/year) 05/02/2004
Applicant THE ARIZONA BOARD OF REGENTS, A BODY CORPORATE...		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

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national application No.

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☒ in written format
 - ☒ in computer readable form
 - c. time of filing/furnishing
 - ☒ contained in the international application as filed
 - ☒ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 18 to 32 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4 completely and 14-32 partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4 (completely) and 14-32 (partially)

polypeptides according to formula 1, related compositions,
expression vectors, host cells and methods

2. claims: 5,6 (completely) and 14-32 (partially)

polypeptides according to formula 2, related compositions,
expression vectors, host cells and methods

3. claims: 7,8 (completely) and 14-32 (partially)

polypeptides according to formula 3, related compositions,
expression vectors, host cells and methods

4. claims: 9,10 (completely) and 14-32 (partially)

polypeptides competing with free GalNAc for binding to a
GalNAc-specific lectin, related compositions, expression
vectors, host cells and methods

5. claims: 11-13 (completely) and 14-32 (partially)

polypeptides competing with one or more polypeptides
according to SEQ ID NOs: 1-23,29,31-33, and 36-45 for
binding to a GalNAc-specific lectin, related compositions,
expression vectors, host cells and methods

6. claims: 33-37

method for identifying a GalNAc-polypeptide mimetic

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Int'l Application No
PC1/US2005/003766

A. CLASSIFICATION OF SUBJECT MATTER

INV. C07K14/57 G01N33/68 A61K38/21 A61K39/00 C12N15/23
C12N15/63

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C07K G01N A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, Sequence Search, CHEM ABS Data, BIOSIS, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 551 795 B1 (RUBENFIELD MARC J ET AL) 22 April 2003 (2003-04-22) column 1 - column 2; sequence 27024 -& DATABASE PSIPS [Online] USPTO; SEQ ID NO: 27024 for US6551795 18 October 2005 (2005-10-18), XP002349772 retrieved from HTTP://SEQDATA.USPTO.GOV/?PAGEREQUEST=VIEW SEQUENCE&DOCID=06551795&SEQID=27024 abstract	1,14-32
A	WO 02/058589 A (NORTHEASTERN OHIO UNIVERSITIES COLLEGE OF MEDICINE; SCHNEIDER, GARY, B) 1 August 2002 (2002-08-01) page 4 - page 5; claims 1-3,5,9-11; figure 1	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

18 October 2005

Date of mailing of the international search report

05. 04. 2006

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 96/40903 A (YAMAMOTO, NOBUTO) 19 December 1996 (1996-12-19) page 3 - page 6 -----	
A	US 5 641 747 A (POPOFF ET AL) 24 June 1997 (1997-06-24) the whole document -----	
A	WO 00/31130 A (BIO MERIEUX) 2 June 2000 (2000-06-02) page 5; claims 1,23; sequence 17 -----	

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6551795	B1	22-04-2003	NONE	
WO 02058589	A	01-08-2002	CA 2426154 A1 EP 1347953 A2	01-08-2002 01-10-2003
WO 9640903	A	19-12-1996	AT 307885 T AU 6253596 A BR 9609072 A CA 2223940 A1 CN 1510147 A CN 1191567 A DE 69635346 D1 EP 0837932 A1 JP 11511962 T NO 975771 A US 5712104 A US 2002055140 A1	15-11-2005 30-12-1996 24-10-2000 19-12-1996 07-07-2004 26-08-1998 01-12-2005 29-04-1998 19-10-1999 30-01-1998 27-01-1998 09-05-2002
US 5641747	A	24-06-1997	NONE	
WO 0031130	A	02-06-2000	CA 2354152 A1 EP 1131345 A1	02-06-2000 12-09-2001